Li-S Energy

Established in 2019, Li-S Energy is a world-leading Australian company possessing sovereign manufacturing capabilities for lithium sulfur battery cells. Our technology enhances mission effectiveness across air, land and sea domains - extending range, operations time and payload over a broad spectrum of capabilities.



CAPABILITIES

Lithium sulfur Energy Cell:

- 465Wh/kg gravimetric energy density after formation cycling.
- >540Wh/l volumetric energy density.
- TRL 6.
- 2MWh cell manufacturing capacity - largest in AUS.

Lithium sulfur Power Cell (In Development):

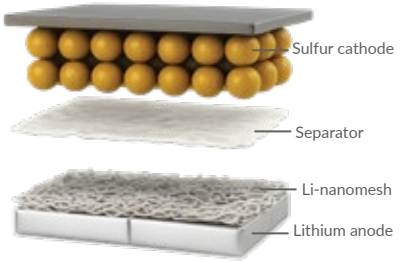
- 10Ah cell at 5C discharge, >350Wh/kg.

In house testing capability:

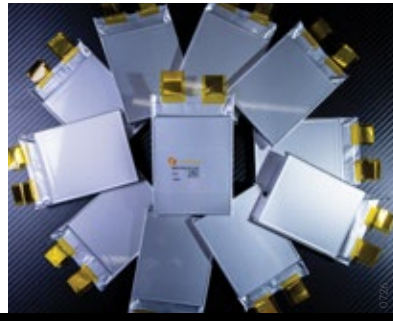
- Nail penetration & crush; Drop; Short circuit & Overcharge; temperature & high altitude; Vibration.
- Advanced cell cyclers able to simulate cell loadings during specific mission profiles.
- Automated systems for real-time test data harvesting & production data integration, enabling AI based performance analysis.

DISCRIMINATORS

- Twice the energy density compared with incumbent lithium-ion cells.
- Unique patented technology to substantially increase the cycle life of lithium sulfur batteries.
- 100% depth of discharge.
- Ability to maintain operational readiness, 100% charge capacity.
- Built without nickle, cobalt, or manganese - reducing reliance on China-centric processing and supply chains, while delivering a cleaner, more sustainable operational edge.
- Easier and more carbon-friendly recycling.







KEY MARKET / USE CASES

Military Drones

- Reduced Weight
- Longer time on target
- Increased Range
- Increased Payload

UAVs

Lighter weight extends flight duration, supports higher payloads and improves operations efficiency in remote missions, ideal for:

- Surveillance
- Cargo delivery
- Agricultural monitoring
- Disaster relief

Land & Marine

Lightweight, high-energy-density batteries enable extended mission duration and reduced weight to power support systems for tactical vehicles (e.g., light armored vehicles, unmanned ground vehicles, unmanned marine vehicles).

CERTIFICATIONS

- BMS/QMS - ISO9001 certified
- MIL-PRF-32383/4X nail penetration testing - Passed
- Testing underway to UN38.3, UL2271 & UL2580
- AUKUS member

PARTNERS

MSubs Ltd
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V-TOL AEROSPACE
DIAS
DEAKIN UNIVERSITY
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GREATER CAPACITY

LIGHTER WEIGHT

ALLIED SUPPLY CHAIN

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